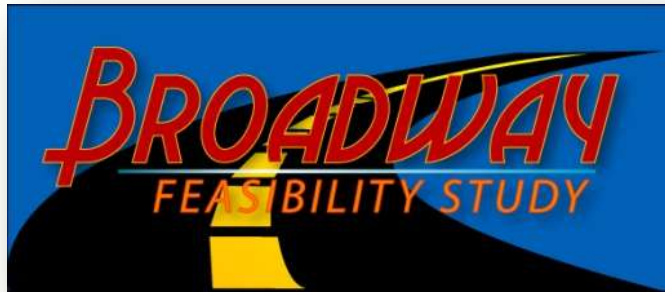


Broadway Feasibility Study Final Public Meeting



Charlie Fielder, District Director

Brad Mettam, Deputy District Director,
Planning and Local Assistance

Kevin Tucker, Project Planner

February 27, 2014



Agenda Overview

- Background/History
- Purpose & Need
- Study Methodology
- Current Improvement Scenarios
- Next Steps
- Open House



Why a Feasibility Study?

- History
 - Eureka Crosstown Freeway was never built
 - Initiated in 1960, Rescinded in 1995
- Economy
 - Transportation funding is very competitive
- Congestion & Safety
 - The corridor is one of most congested in Area
- Study Outcome
 - The scenarios will influence future projects in the corridor
 - More competitive for future funding



Pedestrian and Bicycle Road Safety Audit

- Most Critical Issue
 - continuity and connectivity of bicycle and pedestrian facilities
- Second Most Critical Issue
 - long distances between crossings at intersections
- Other issues
 - access control, conflicts at pedestrian crossings, conflicts in the two-way left-turn lane, accessibility restrictions, maintenance and drainage, and signage



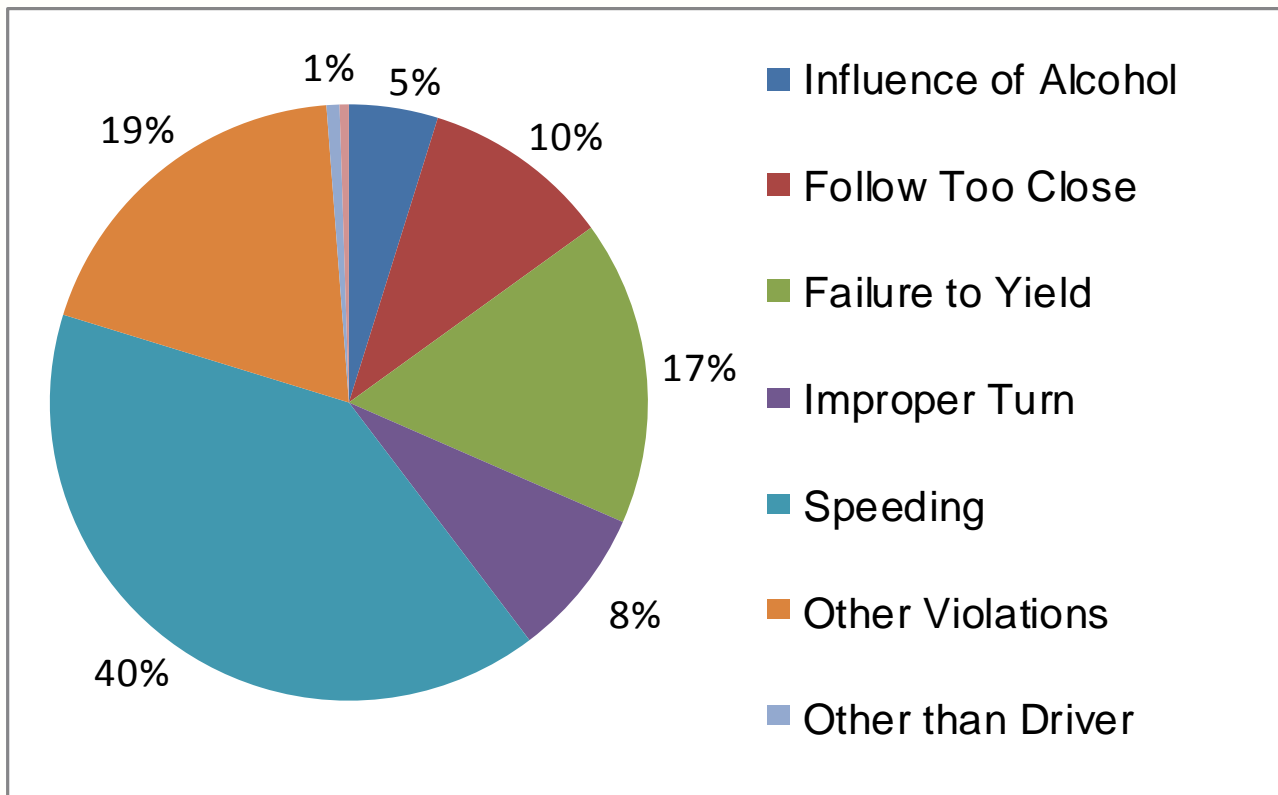
2002 - 2012 Collision History

- Total Collisions = 1068
- Fatal = 7
- Injury = 507
- Property Damage Only = 554

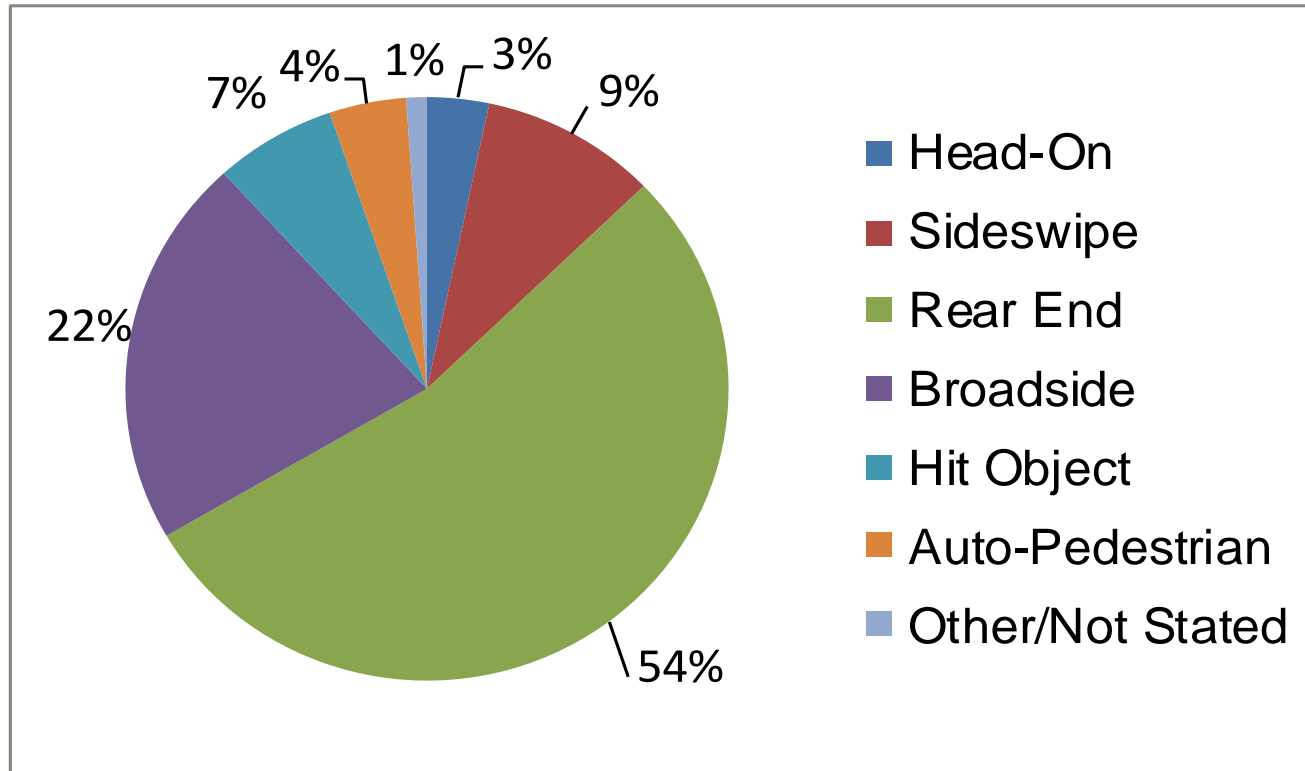


Collision Causes

Primary Collision Factors



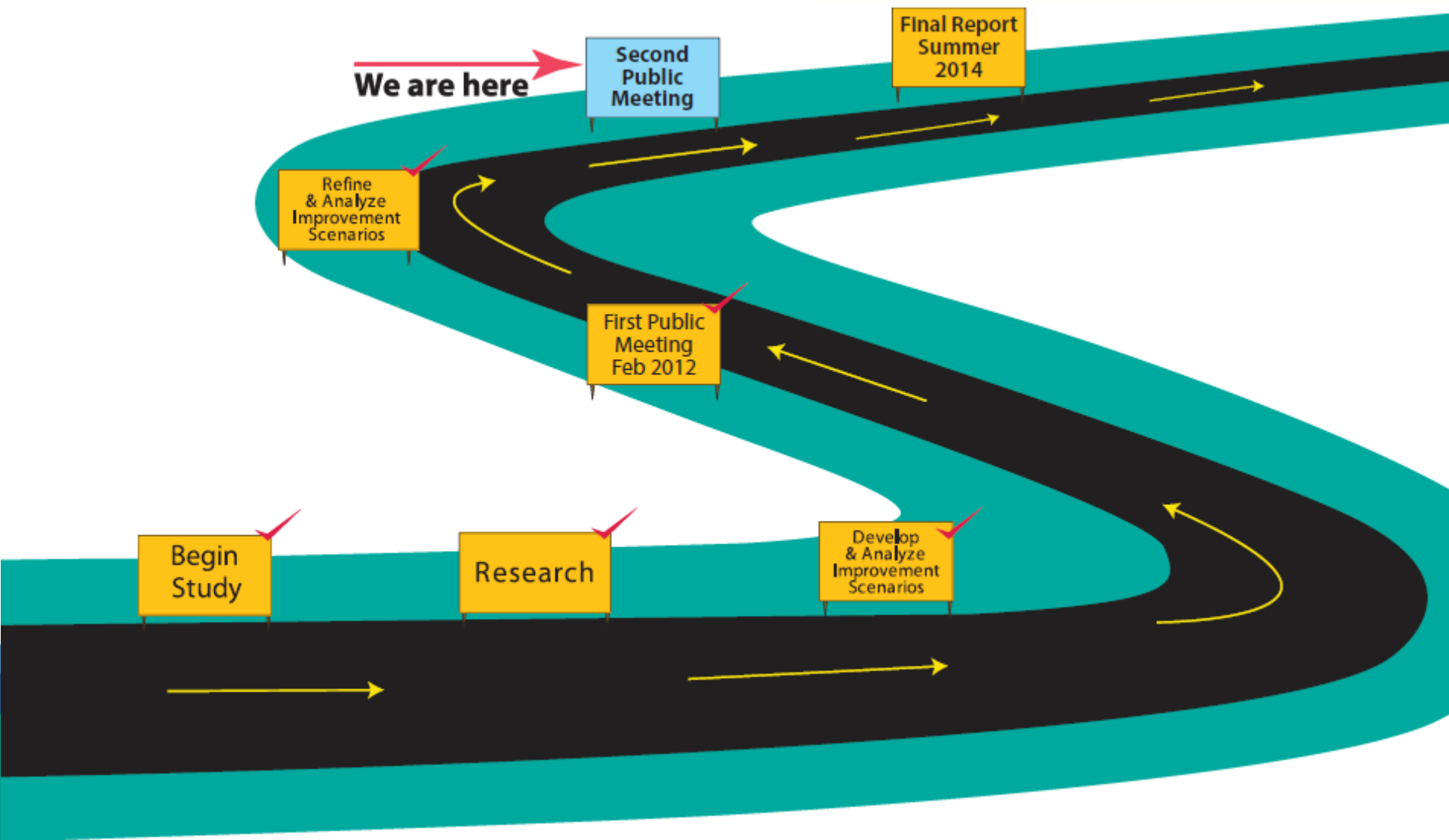
Types of Collisions



Collision Reduction

Crash Reduction Factor		
	Serious, Minor Injury Crash Reduction (%)	Property Damage Crash Reduction (%)
Installing Raised Median (Replacing Two Way Left Turn Lane with Raised Median)	21%	33%

FEASIBILITY STUDY PROCESS



STUDY PURPOSE & NEED

Purpose

Identify sustainable future improvement scenarios to enhance mobility for all modes of transportation

Need

- Collision rates four times statewide average versus similar corridors
- Reduce corridor congestion
- Mobility for all transportation modes

Study Description

Identify and evaluate safety, operational, and mobility improvements for all modes of transportation



NEED & BENEFIT

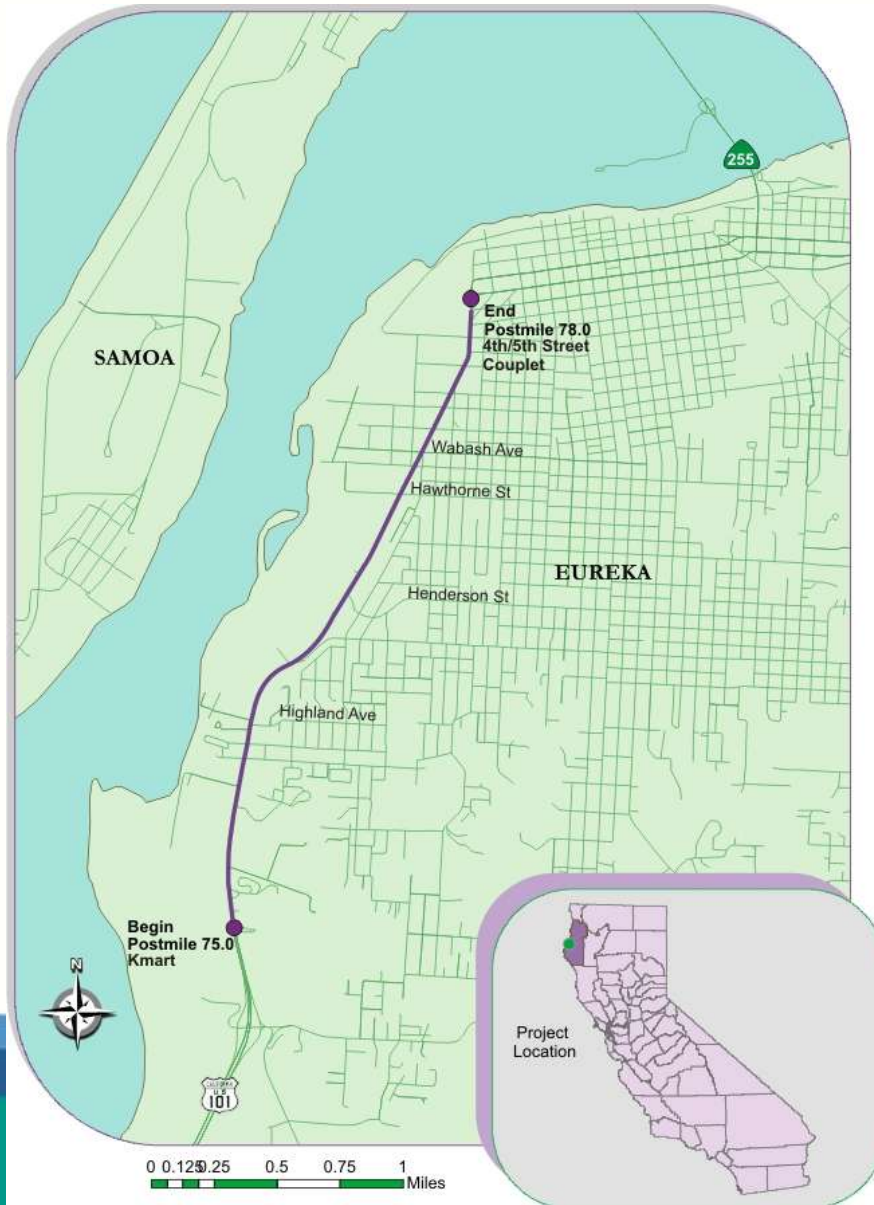
Corridor Issue	Improvement Feature	Benefit
<i>Collisions</i>	Traffic Signal	<ul style="list-style-type: none"> • Protected Turning Movements • Defined Pedestrian Crossing
	Raised Median	<ul style="list-style-type: none"> • Decreased Conflict Points
	Northbound Leg of Fairfield Closed	<ul style="list-style-type: none"> • Decreased Conflicting Movements at Intersection
<i>Congestion</i>	Traffic Signal	<ul style="list-style-type: none"> • Maintains Regular Vehicle Spacing
	Raised Median	<ul style="list-style-type: none"> • Access Control • Reduce Vehicular Conflicts
	Northbound Leg of Fairfield Closed	<ul style="list-style-type: none"> • Improved Signal Timing
<i>Multi-Modal Transportation</i>	Signals (Crosswalks)	<ul style="list-style-type: none"> • Pedestrian Connectivity • Vehicle Connectivity • Bicycle Connectivity
	Shoulders	<ul style="list-style-type: none"> • Bicycle Facility



Project Location Map

Post Mile 75.0 to 78.0
along Broadway

(Kmart Entrance to
4th/5th Street)



Computer Modeling

- Microsimulation modeling to compare transportation improvement scenarios
- Includes driveways and access points, lane widths, turn pockets, signals, etc.
- Produces Metrics: travel time, vehicle speed, vehicle delay
- “Living” model that attempts to reflect driving conditions



Improvement Scenario Considerations

- Environmental Impacts
- Cost
- Right-of-Way Impacts
- Safety
- Ease of Implementation
- Public Input



Scenario Descriptions

All Scenarios

- No parking (Kmart to Wabash St)
- Bike lanes (Kmart to Wabash St)
- Protected left turns (Wabash & 14th St)
- Traffic signal coordination
- Close northbound Fairfield Ave

Scenario 1.0

- Traffic signal at Hawthorne St
- Traffic signal at Clark St
- Raised median 12' wide with openings at signalized intersections (McCullens to 4th/5th St)
- Raised median 2.5' wide (Cedar to 5th St)
- Left turns restricted during peak hours (Clark St & Washington St)
- Bike lanes (Cedar to 4th/5th St)

Scenario Descriptions

Corridor Improvements						
Scenario	1.0	2.0	3.0	4.0	5.0	6.0
Raised median (openings at signalized intersections)	✓	✓				
Raised median (openings at signalized intersections & midblock)			✓	✓	✓	✓
Hawthorne St. traffic signal	✓		✓	✓		
Hawthorne St. turn restrictions		✓			✓	✓
Clark St. traffic signal	✓					
Henderson St. additional right turn lane				✓		✓
Bike lanes (Cedar St. to 4th/5th St.)	✓	✓				

Scenario Performance Measures

	Scenarios						
	Base*	1.0	2.0	3.0	4.0	5.0	6.0
Vehicle Operations							
Travel time in minutes	8:46	8:28	7:54	8:25	8:49	8:18	7:50
Vehicle Safety							
Decreased number of left turn conflicts		~100	~100	~90	~90	~90	~90
Increased number of protected left turn movements at signals		12	4	8	8	4	4
Bicycle Safety/Mobility							
Additional bike lane length in miles		2.5	2.5	2.0	2.0	2.0	2.0
Pedestrian Safety/Mobility							
Increased number of protected crosswalks		9	1	5	5	1	1

*Base scenario calculated using computer modeling of future traffic conditions for the year 2020. All scenario travel times are provided for comparison purposes.

Current Projects

- Broadway ADA (Americans with Disabilities Act) Project
 - Replace/install curb ramps, sidewalks, driveways, splitter islands
 - Install audible pedestrian systems at all existing signalized intersections
- Hawthorne/Wabash Safety Project
 - Construct a raised median (12' wide)
 - Two Options: Hawthorne traffic signal versus turn restrictions
 - Close northbound leg of Fairfield Street
- Adaptive Traffic Signal Control Project
 - Coordinate traffic signals in real time
 - better reflect actual conditions on the road
 - Improves the flow of traffic and reduces congestion



Next Steps

- Document community response
- Finalize Feasibility Study (Summer 2014)
- Develop projects based on feasible scenarios (Ongoing)



Open House

- View Displays
- Ask Questions
- Provide response on comment cards

